

ADDITIONAL NOTES ON THE GENUS PITRAEA. V

Harold N. Moldenke

For a detailed explanation of the herbarium acronyms used in this and all others in my series of notes on this and other genera, see my Fifth Summary 2: 795--801 (1971).

PITRAEA Turcz.

Additional bibliography: Feldman & Gracia, *Phytopath. Zeit.* 90: 87--90. 1977; López-Palacios, *Fl. Venez. Verb.* 503 & 652. 1977; Anon., *Roy. Bot. Gard. Kew Lib. Curr. Awaren.* 9: 23. 1978; Feldman & Gracia, *Biol. Abstr.* 66: 2922. 1978; Mold., *Phytologia* 40: 263, 466, 506, & 516. 1978; A. L. Mold., *Phytologia* 40: 361. 1978; Prosperi & Cocucci, *Kurtziana* 12/13: 78. 1979; Rogerson, Becker, & Prince, *Bull. Torrey Bot. Club* 106: 62. 1979.

López-Palacios (1977) places the genus Phelloderma Miers in the synonymy of Priva Adans., but this is incorrect -- it clearly belongs in the synonymy of Pitraea.

PITRAEA CUNEATO-OVATA (Cav.) Caro

For bibliography see under the genus as a whole.

Feldman & Gracia (1977) report finding the alfalfa mosaic virus (AMV) on this host in Mendoza, Argentina, as well as on Origanum vulgare, Convolvulus arvensis, Physalis viscosa, P. mendocina, and Chenopodium album.

ADDITIONAL NOTES ON THE GENUS PSEUDOCARPIDIUM. I

Harold N. Moldenke

For a detailed explanation of the herbarium acronyms used in this and all others in my series of papers on this and other genera, see my Fifth Summary 2: 795--801 (1971).

PSEUDOCARPIDIUM Millsp.

Additional synonymy: Pseudocarpium Millsp. ex Mold., *Résumé Suppl.* 3: 35, in syn. 1962.

Additional & emended bibliography: Jacks. in Hook. f. & Jacks., *Ind. Kew.*, imp. 1, 2: 1213--1214. 1895; Millsp., *Feddes Repert. Spec. Nov.* 7: 285--286. 1909; A. R. Northrop in J. I. Northrop, *Naturalist Bahamas* 180, 204, & 211. 1910; Fedde & Schust., *Justs Bot. Jahresber.* 53 (1): 1077 (1932) and 57 (2): 404. 1938; Jacks. in Hook. f. & Jacks., *Ind. Kew.*, imp. 2, 2: 1213--1214. 1946; Metcalfe & Chalk, *Anat. Dicot.* 1035, 1037, & 1041. 1950; Angely,

Cat. Estat. Gen. Bot. Fan. 17: 5. 1956; Mold., Phytologia 7: 91--104 (1959) and 7: 112--118, 123, 293, 300, & 305. 1960; Jacks. in Hook. f. & Jacks., Ind. Kew., imp. 3, 2: 1213--1214. 1960; Mold., Biol. Abstr. 35: 1465 & 2177. 1960; Mold., Phytologia 7: 321, 326, & 511. 1961; Hocking, Excerpt. Bot. A.5: 45. 1962; F. A. Barkley, List Ord. Fam. Anthoph. 76 & 201. 1965; Mold., Phytologia 12: 6. 1965; Airy Shaw in J. C. Willis, Dict. Flow. Pl., ed. 7, 927. 1966; J. J. Jiménez, Cat. Fl. Doming. Supl. 1: 219. 1966; Kundu & De, Bull. Bot. Surv. India 10: 406. 1968; Anon., Torrey Bot. Club Ind. Am. Bot. Lit. 3: 309. 1969; Mold., Fifth Summ. 1: 6, 93, 97, 99, 103, & 368 (1971) and 2: 604, 614, 618, 713, 716, 719, 723, 727, 731, 758, & 906. 1971; Alemán Frías, Aurich, Ezcurra Ferrer, Cutiérrrez Vázquez, Hortsmann, López Rendueles, Rodríguez Graquintena, Roquel Casabella, & Schreiber, Die Kulturpfl. 19: 422. 1972; Airy Shaw in J. C. Willis, Dict. Flow. Pl., ed. 8, 951. 1973; Farnsworth, Pharmacog. Titles 8 (8): xvii. 1973; Alain in León & Alain, Fl. Cuba, imp. 2, 2: 280 & 314--316, fig. 136. 1974

PSEUDOCARPIDIUM AVICENNIOIDES (A. Rich.) Millsp.

Additional & emended bibliography: Jacks. in Hook. f. & Jacks., Ind. Kew., imp. 1, 2: 1213. 1895; Millsp., Feddes Repert. Spec. Nov. 7: 285. 1909; Jacks. in Hook. f. & Jacks., Ind. Kew., imp. 2, 2: 1213. 1946; Alain in León & Alain, Fl. Cuba, imp. 1, 4: 314 & 315. 1957; Mold., Phytologia 7: 96--98. 1959; Jacks. in Hook. f. & Jacks., Ind. Kew., imp. 3, 2: 1213. 1960; Mold., Biol. Abstr. 35: 1465. 1960; Hocking, Excerpt. Bot. A.5: 45. 1962; Mold., Fifth Summ. 1: 97 (1971) and 2: 713 & 906. 1971; Alain in León & Alain, Fl. Cuba, imp. 2, 2: 314 & 315, fig. 136. 1974.

Additional & emended illustrations: Alain in León & Alain, Fl. Cuba, imp. 1, 4: 315, fig. 136 (1957) and imp. 2, 2: 315, fig. 136. 1974.

Recent collectors have encountered this species in coastal thickets and at altitudes up to 100 meters, flowering in July and November.

Additional citations: CUBA: Oriente: Alain 838 (W--2287997); Clémente 2236 (W--2288435); León 12375 (W--2289347); Morton & Alain 8944 (W--2285076).

PSEUDOCARPIDIUM DOMINGENSE (Urb. & Ekm.) Mold.

Additional bibliography: Fedde & Schust., Justs Bot. Jahresber. 57 (2): 404. 1938; Mold., Phytologia 7: 99--100. 1959; Hocking, Excerpt. Bot. A.5: 45. 1962; J. J. Jiménez, Cat. Fl. Doming. Supl. 1: 219. 1966; Mold., Fifth Summ. 1: 103 (1971) and 2: 716 & 906. 1971.

Recent collectors describe this species as a shrub, to 4 m. tall, with ascending branches and gray or grayish-green fruit, and have found it growing in open thickets on limestone, at 50--100 m. altitude, flowering and fruiting in June and November. The corollas are said to have been "blue" on Liogier 16914 and Liogier & Liogier 23322.

Additional citations: HISPANIOLA: Dominican Republic: A. H. Lic-

gier 16914 (N, W--2801652, Z); Liogier & Liogier 23322 (N). Haiti: Ekman H.4532 (Ld), H.6996 (Ld), H.7096 (Ld), H.8489 (Ca--608087--isotype).

PSEUDOCARPIDIUM ILICIFOLIUM (A. Rich.) Millsp.

Additional & emended bibliography: Jacks. in Hook. f. & Jacks., Ind. Kew., imp. 1, 2: 1213. 1895; Millsp., Feddes Repert. Spec. Nov. 7: 285 & 286. 1909; A. R. Northrop in J. I. Northrop, Naturalist Bahamas 180, 204, & 211. 1910; Jacks. in Hook. f. & Jacks., Ind. Kew., imp. 2, 2: 1213. 1946; Alain in León & Alain, Fl. Cuba, imp. 1, 4: 314, 315, & 545. 1957; Mold., Phytologia 7: 100--102. 1959; Jacks. in Hook. f. & Jacks., Ind. Kew., imp. 3, 2: 1213. 1960; Hocking, Excerpt. Bot. A.5: 45. 1962; Mold., Fifth Summ. 1: 97 & 368 (1971) and 2: 719 & 906. 1971; Alain in León & Alain, Fl. Cuba, imp. 2, 2: 314 & 315. 1974.

Northrop (1910) records this species from Andros island in the Bahamas, but this is an error. The species on Andros is P. wrightii Millsp.

PSEUDOCARPIDIUM MULTIDENS (Urb.) Mold.

Additional & emended bibliography: Fedde & Schust., Justs Bot. Jahresber. 53 (1): 1077. 1932; Mold., Phytologia 7: 102--104. 1959; Hocking, Excerpt. Bot. A.5: 45. 1962; Mold., Fifth Summ. 1: 97 (1971) and 2: 723 & 906. 1971; Alain in León & Alain, Fl. Cuba, imp. 2, 2: 314--316. 1974.

PSEUDOCARPIDIUM PUNGENS Britton

Additional & emended bibliography: Alain in León & Alain, Fl. Cuba, imp. 1, 4: 314, 316, & 545. 1957; Mold., Phytologia 7: 104 (1959) and 7: 112. 1960; Mold., Biol. Abstr. 35: 1465 & 2177. 1960; Hocking, Excerpt. Bot. A.5: 45. 1962; Mold., Fifth Summ. 1: 97 (1971) and 2: 906. 1971; Alain in León & Alain, Fl. Cuba, imp. 2, 2: 314 & 316. 1974.

PSEUDOCARPIDIUM RIGENS (Griseb.) Britton

Additional & emended bibliography: Jacks. in Hook. f. & Jacks., Ind. Kew., imp. 1, 2: 1214 (1895) and imp. 2, 2: 1214. 1946; Alain in León & Alain, Fl. Cuba, imp. 1, 4: 314, 316, & 545. 1957; Jacks. in Hook. f. & Jacks., Ind. Kew., imp. 3, 2: 1214. 1960; Mold., Phytologia 7: 112--114. 1960; Hocking, Excerpt. Bot. A.5: 45. 1962; Mold., Fifth Summ. 1: 97 (1971) and 2: 727 & 906. 1971; Alain in León & Alain, Fl. Cuba, imp. 2, 2: 314 & 316. 1974.

Recent collectors have encountered this species on serpentine barrens and "charrascales", at 300--400 m. altitude, flowering and fruiting in July.

Additional citations: CUBA: Oriente: Carabia 3581 (N); León & Alain 19277 (W--2289718); León, Clémente, & Howard 20388 (W--2289792); Morton, Alain, & López F. 8783 (W--2284939).

PSEUDOCARPIDIUM SHAFERI Britton

Additional synonymy: Pseudocarpidium shaferi Britton ex Moldenke apud Hocking, Excerpt. Bot. A.5: 45. 1962.

Additional & emended bibliography: Alain in León & Alain, Fl. Cuba, imp. 1, 4: 314, 316, & 545. 1957; Mold., Phytologia 7: 114-115. 1960; Hocking, Excerpt. Bot. A.5: 45. 1962; Mold., Fifth Summ. 1: 97 (1971) and 2: 614 & 906. 1971; Alemán Frías, Aurich, Ezcurra Ferrer, Gutiérrez Vázquez, Horstman, López Rendueles, Rodríguez Graquitená, Roquel Casabella, & Schreiber, Die Kulturpfl. 19: 422. 1972; Farnsworth, Pharmacog. Titles 8 (8): xvii. 1973; Alain in León & Alain, Fl. Cuba, imp. 2, 2: 280 & 314-316. 1974.

PSEUDOCARPIDIUM WRIGHTII Millsp.

Additional synonymy: Pseudocarpium wrightii Millsp. ex Mold., Résumé Suppl. 3: 35, in syn. 1962.

Additional & emended bibliography: Millsp., Feddes Repert. Spec. Nov. 7: 285-286. 1909; Alain in León & Alain, Fl. Cuba, imp. 1, 4: 314, 316, & 545. 1957; Mold., Biol. Abstr. 35: 2177. 1960; Mold., Phytologia 7: 115-118. 1960; Hocking, Excerpt. Bot. A.5: 45. 1962; Mold., Fifth Summ. 1: 93, 97, 99, & 368 (1971) and 2: 614, 713, 727, 731, & 907. 1971; Alain in León & Alain, Fl. Cuba, imp. 2, 2: 314 & 316. 1974.

Recent collectors describe this species as a small arborescent shrub or multitrunked shrubby tree, 2-6 m. tall, the trunk to 15 cm. in diameter at breast height, the leaves coriaceous, the flower-buds blue, and the fruit green, yellow-green, or greenish-yellow. They have encountered it on rocks and on limestone rock outcrops, on valley slopes, in serpentine soil, scattered over rock-flats, in pitted or dense wooded coppices, and "in thorn-scrub on dogtooth limestone platforms at the seashore", flowering from May to July and in September, fruiting in January, June, and July. Hill refers to it as "locally common".

The corollas are said to have been "deep-blue" on Howard 5027, "light-blue" on Webster & al. 76, "midnight-blue" on Correll 43489, "blue-violet" on Gillis 8045, and "blue-purple with white spots on the lower petal" on Howard & al. 115.

The Gillis 8045 & 9803, cited below, are said to have come from shrubs introduced from Andros island.

Additional citations: BAHAMA ISLANDS: Andros: Correll & Proctor 47866 (N); S. R. Hill 3357 (N); J. Popenoe s.n. [Nov. 16, 1965] (Ft--2207). North Andros: Correll, Sauleda, Stevenson, Miller, & Fehling 49328 (N). South Andros: D. S. Correll 43489 (N). CUBA: Havana: León 5215 (W--2289133). Las Villas: Hodge & Howard 5027 (Ca--913805); R. A. Howard 5027 (Mi); Howard, Briggs, Kamb, Lane, & Ritland 5 (Ca--999021), 115 (Ca--999113, Mi); C. V. Morton 10507 (W--2350980), 10510 (W--2350983); Webster, Dressler, Jones, Schubert, & Wilson 76 (N). CULTIVATED: Florida: Gillis 8045 [FG-65-332] (Ba, Ft--2599), 9803 (Ba).